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overflowed meadows and along river bottoms. In such places the two plants often grow together, but in woods or wet places on higher ground, where *C. squarrosa* often grows in abundance, *C. typhinoides* seems never to occur.

Extreme forms of these two sedges are strikingly unlike in appearance; other forms show a similarity of aspect which is sometimes confusing. However the identity of such forms comes out plainly enough upon closer observation, and can always be instantly established by an appeal to fruit characters. The differences in the achenes and styles of the two plants is especially noteworthy and have proved to be singularly constant in a large number of specimens from widely separated localities.

It may be added that *Carex squarrosa* as described by Linnaeus is clearly that species as distinguished from *Carex typhinoides;* so also is the *Carex typhina* of Michaux. The species was first figured by Schweinitz and Torrey (Monograph, plate 27); later it was figured by Dewey (11 : *pl. 2. fig. 29.* 1826). Boott's illustrations of *Carex squarrosa* (1860) refer in part only to that species as here defined. His plate 281 is unmistakably *Carex typhinoides,* while plate 280 can scarcely be other than a composite figure made up partly of each species.

## Notes on some Florida Plants.—II.

By Geo. V. Nash.

My second collection of Florida plants was made in 1895, beginning late in May and ending early in September. Very little collecting, except among the Fungi and Lichens, was done in Eustis or its vicinity, the field of my operations the previous year, although I again made this place my headquarters. The area explored extended from the Manatee River in the south to Jacksonville in the north, thence westward through Columbia, Jefferson, Leon and Gadsden Counties, to the Apalachicola River. This was my main collecting ground, and is all tributary to the Florida Central and Peninsular Railroad. The country traversed by this road is very interesting, particularly from a botanical standpoint, the flora varying from semi-tropical to temperate. The terminus

of the southern division is at Tampa, where the vegetation is semi-tropical. The country to the north of this is an alternation of high pine land, called locally "black jack ridges," and flatwoods, yielding a most interesting lot of plants. The western division extends from Baldwin to River Junction in Gadsden county. The flora of this section is quite different from that of the peninsula, and more nearly approaches that of the North. This is particularly the case at Tallahassee and in its immediate vicinity. The soil is a red clay, and the country one of hills and valleys, a most unusual condition for this State. Familiar plants of the North were continually turning up. This red clay country is only a few miles in extent, however, and soon disappears, the pine lands again becoming prominent.

As stated above, my main collecting field was from the Manatee river to the Apalachicola river. In addition to this I made two or three trips to Sanford, in Orange Co.; one to Titusville, on the Indian River, in Brevard Co., my only approach to the east coast; and a short trip from Tallahassee to St. Marks, in Wakulla Co., where Rugel collected in 1843 and discovered some interesting things, some of which I succeeded in again finding.

The Mantatee river is nearly tropical in its flora. On Sneed's Island, at the mouth of this river, are found a number of strictly tropical plants, which cannot be secured on the mainland for a number of miles further south. Their occurrence on this island is probably due to the immunity it enjoys from frost, the water serving as a protection.

The above brief account will give some idea of the varied nature of my collections in 1895. A large number of species and varieties new to science, some plants hitherto unknown to occur in the State, and a number of rare things were secured. The following notes on the more important acquisitions may be of interest:

*Tumion taxifolium* (Arn.) Greene. (*Torreya taxifolia* Arn.) The only known locality, the Apalachicola river, for this rare conifer was visited in August and September. The natives, by whom it is called "stinking cedar," informed me that it occurred from just south of the Georgia line to a distance of some fifteen miles down the river, and that it was confined exclusively to the eastern

bank. The locality where I saw it growing was about one quarter of a mile north of River Junction. In this spot there were some twenty or thirty trees. The tree is conical in outline, the branches horizontal and widely spreading. The foliage is a fine deep green, the upper surface shining. The odor of the bruised leaves is very disagreeable, as I discovered on climbing one of the trees, and the local name of "stinking cedar" is well applied. The leaves are also quite sharp-pointed and irritate the skin considerably, causing an unpleasant burning sensation. On my first visit in August I succeeded in finding only one tree in fruit. On my next visit, on September 5, I discovered further up two or three more fruiting specimens.

The tree is evidently having a hard struggle to maintain itself. In the locality visited by me it occupies the very extremities and sides of the small ridges extending from the high pine land out into the river swamp. I could find none in the low-lying ground at the base of the ridges nor in the high pine land further back. Its evident inability to thrive in the very low land and the antagonism of the other surrounding trees which are better suited to the environment make its final extinction apparently certain. No. 2381.

*Paspalum arenarium* Schrad. In the low pine land around Eustis, Lake Co. Not very common. No. 2074.

*Paspalum racemosum* Nutt. Rare. Found in the pine land at River Junction, Gadsden Co. In the living state the plant has a decidedly glaucous hue. No. 2579.

*Cenchrus gracillimus* Nash. Further observation of this grass in the field confirms the disposition I made of it last year. It is very distinct from *C. tribuloides*. This grass is very common around Eustis, Lake Co., but its occurrence in the northern and western parts of the State was not noticed. No. 1766.

*Cenchrus incertus* M. A. Curtis. Quite common in the pine land at River Junction, Gadsden Co., but not seen east of that place, nor in the peninsula. It is very distinct. The broader spines, and the entire absence of reflexed spines at the base of the involucre, giving it a naked appearance, well distinguish it from any form of *C. tribuloides*. No. 2580.

HYDROCHLOA FLUITANS (Michx.) (*Hydrochloa Carolinensis* Beauv.). At Lloyds, Jefferson Co., flowering profusely, in which condition it is very rare. In a sterile state it is very common in many bodies of still water. No. 2512.

ARISTIDA PATULA Chapm. ined. (*Aristida scabra* Chapm. Fl. S. St. 663. 1884. Not Kunth, 1833.) In the pine land back of Titusville, Brevard Co., No. 2295; near Sanford, Orange Co., No. 2276; and very common just back of the beach line at Ballast Point, near Tampa, where it grew luxuriantly, forming large tufts, No. 2424a.

ERAGROSTIS HIRSUTA (Michx.) Not Nees, 1829, nor Wood, 1861. (*Poa hirsuta* Michx.) Very common in fields at Tallahassee, Leon Co., forming broad tufts, 2–3 feet tall. No. 2521. The synonymy of this grass is exceedingly mixed. The *E. hirsuta* Nees (Fl. Bras. 2: Part 2, 508. 1829), *E. hirsuta* Wood (Classbook, 796. 1861), and *Poa hirsuta* Muhl. (Gram. 145. 1817), appear to be the *E. pectinacea* A. Gray, judging from the descriptions given in each case. The *Poa hirsuta* Michx. is apparently an entirely different plant, as evidenced by a fragment of the type of Michaux, preserved in the Columbia College Herbarium. This grass ranges from North Carolina to Florida, thence west to Louisiana, and possibly to Texas. It has been confounded with *E. capilliaris* Nees. Curtiss' No. 3499 belongs here.

*Uniola longifolia* Scribn. Found growing abundantly along the edge of a dry woods, near Tallahassee, No 2521; also in pine woods at River Junction, Gadsden Co., about forty miles to the west of the above place, No. 2591a. I was much surprised at its further occurrence in some abundance in a tropical hammock on Sneed's Island, near the mouth of the Manatee River, in the southern part of the peninsula, over 400 miles from the above named localities. The villous sheaths of this species are constant, and readily separate it from the others of the genus.

*Rynchospora miliacea* (Lam.) A. Gray. Apparently rare, as I found it in only two places, both within a few miles of Eustis, Lake Co., No. 1845.

*Scleria hirtella* Sw. Rare. Among tall grass in the low pine land, near Eustis, Lake Co., No. 1917.

SABAL ETONIA Swingle, n. sp.

Plant 8–14 dm. tall. Rootstock more or less contorted, elongated, bearing numerous roots on the lower surface along its entire length; leaves nearly orbicular in outline, 4–6 dm. long, about two-thirds the length of the petioles, strongly folded at the base along the middle, divided almost to the bottom, the divisions linear, acuminate, the sinuses long-filiferous; petioles 1–1.5 cm. broad, smooth, triangular, the back rounded, the edges sharp; spadix a little shorter than the leaves, branching above, erect or ascending in flower, prostrate in fruit; flowers yellowish white; divisions of the perianth elliptic, obtuse, 5-nerved, 3–3.5 mm. long, 1. 5–1.75 mm. broad, concave; stamens a little longer than the perianth, the filaments broad-subulate, slightly exceeding 3 mm. in length; anthers narrowly ovate, about 1.5 mm. long; fruit 1.3–1.5 cm. in diameter.

Very common in and confined strictly to the "scrub." Collected in 1894 in the vicinity of Eustis, Lake Co., and distributed under No. 999.

Mr. W. T. Swingle, of the Sub-Tropical Laboratory at Eustis, first called attention to this new palm at the meeting of the Botanical Club, A. A. A. S., in Madison Wis., in August, 1893,* but no description of it has hitherto been published, so far as I am able to ascertain.

It is related to *S. Palmetto*, but it is abundantly distinct from that species, particularly in its manner of growth. The rootstocks of the two species are totally unlike. In the seedling state they are probably very similar, judging from examinations made on comparatively young plants of both forms. As they grow older, however, the differences in manner of growth become very marked. In *S. Etonia* the rootstock is elongated and more or less contorted, in some instances doubling and redoubling on itself, forming a perfect S. It is firmly anchored in the soil by innumerable roots, borne along its under surface, the growing end running along the surface of the soil, but never rising above it. As stated above, the rootstock is always elongated, from 2–3 feet in length, the rear part apparently dying and rotting away as the bud advances.

In *S. Palmetto* the behavior of the rootstock is very different, and only in very young plants can its early stages be found. It goes directly down, then bends sharply and rises to the surface,

*Bull. Torr. Bot Club, 20:364. 1893. Bot. Gaz. 18:348. 1893.

continuing in an erect aërial stem which often attains a height of 50–70 feet. In the young plants this downward portion is manifest as an erect spur-like body, appressed to and much smaller than the ascending part of the rootstock, but it soon disappears and in plants but a few feet in height no trace of it can be found. In old individuals, therefore, the subterranean extremity of the trunk is knob-like, with hundreds of roots radiating in all directions, making a marked contrast to the elongated and contorted rootstock of *S. Etonia*, bearing roots its entire length. The fruit in *S. Etonia* is larger than that in *S. Palmetto*.

*Lachnocaulon Beyrichianum* Sporleder. Very abundant around the shores of Blue Lake and Lake Gracie, both near Eustis, Lake Co. No. 1855.

*Lachnocaulon glabrum* Koern. Not as common as the above. Along the sandy shore of Blue Lake, near Eustis. No. 1981.

HABENARIA CONSPICUA n. sp.

Whole plant glabrous, 4–8 dm. tall. Leaves linear to lanceolate-linear, erect or ascending, usually acute, the lower one 10–25 cm. long, 1–2 cm. broad, the remaining ones gradually becoming shorter and passing into the bracts of the inflorescence; spike ovate to oblong, 6–12 cm. long, 5–7 cm. in diameter; flowers numerous, white; tube of the calyx 2–2.5 cm. long, the sepals orbicular or nearly so, 7 mm. in diameter; petals oblanceolate, about 5 mm. long, from nearly entire to more or less toothed at the apex; lip 12–15 mm. in length, narrowly oblong, the claw 4–5 mm. long, the blade deeply fimbriate; spur curved, narrowly cylindric, 4–5 cm. in length.

Collected on the edge of a sphagnum bog at Lake City, Columbia Co., No. 2501, and observed at a number of other places. It was distributed in my collection of 1894, under No. 1700, as *H. blephariglottis*, from which it is abundantly distinct, the larger flowers, longer spur, and deeply fimbriate lip readily separating it.

*Tipularia unifolia* (Muhl.) B. S. P. In great abundance and in fine condition on a damp hillside near Tallahassee, Leon Co. No. 2361.

*Persea humilis* Nash. Further observation in the field confirms me in the disposition made of this tree last year. It is confined exclusively to the "scrub," a sandy area covered with scrub oaks, intermixed with the scrub pine, *P. clausa*, and the home of *Sabal Etonia*. When in the virgin "scrub," it rarely attains a height of

more than 6 or 8 feet. In the open, or along the roadside, where the surrounding shrubs have been cut away, it often becomes 15 or 20 feet tall. Mr. H. J. Webber, of the Sub-Tropical Laboratory at Eustis, kindly collected for me last November a lot of fine fruiting specimens, thus enabling me to distribute it in fruit, No. 2601.

WAREA SESSILIFOLIA n. sp.

Annual. Whole plant glabrous, branched, sometimes diffusely so, 3–6 dm. tall; leaves erect or ascending, ovate, sessile, those on the stem 1–2 cm. long, 5–10 mm. broad, those on the branches gradually reduced, the uppermost one usually about 5 mm. long; racemes densely flowered, 2–3 cm. in length; pedicels filiform, 6–10 mm. long; sepals spatulate, purple at the broadened base, becoming greenish towards the apex, 7–8 mm. long, about 1 mm. broad, reflexed; petals deep purple, the claw 5–6 mm. long, filiform above, gradually broadened toward the base, pubescent on the lower half, the blade broadly ovate or oval, abruptly narrowed into the claw, about 5 mm. long, 4–4.5 mm. broad; stamens about 1.5 cm. in length, the filaments thread-like, purple except toward the white summit; anthers linear, coiled when dry, 2 mm. long, .5 mm. broad; pod not seen.

Collected in the pine lands at Bellair, about 4 miles south of Tallahassee, Leon Co. The larger deep purple flowers and the ovate merely sessile leaves, not sagittate nor clasping as in *W. amplexifolia*, readily distinguish this plant from either of the other species. No. 2544.

GLOTTIDIUM FLORIDANUM ATRO-RUBRUM n. var.

Flowers a deep black-purple. Otherwise much as in the type.

Occurring from Tampa, where my specimens were secured, southward, No. 2415. In this region it entirely replaces the yellow-flowered form which is very common from Lake Co. north to Jacksonville and west to Tallahassee.

*Melia Azederach* L. Escaping into the low woods around Eustis, Lake Co.; also at Tallahassee, Leon Co., where my specimens were obtained. No. 2359.

*Crotonopsis spinosa* Nash. Found in great abundance about three miles north of Eustis, Lake Co., No. 1971. Very common from Lake City, Columbia Co., westward.

CYRILLA PARVIFOLIA Shuttlw. n. sp.

A compact and much branched shrub about two metres tall.

Glabrous; leaves cuneate-obovate or oblanceolate, short-petioled, reticulate, acute, or the smaller ones obtusish, 1.5–5 cm. long, 5–12 mm. wide; racemes 3–8 cm. in length; flowers numerous, sepals triangular, 1 mm. long, slightly longer than broad, petals narrowly elliptic-ovate, rugose-thickened at the base and along the middle for about two-thirds their length, obtuse, 2.5 mm. long, 1 mm. broad; stamens 2.5 mm. long, filaments linear-subulate, anthers oval, .6 mm. long; capsule nearly globuse, slightly flattened laterally, 2.5–3 mm. in diameter.

Collected in fruit at St. Marks, Wakulla Co., No. 2543. Since distributing my plants I find that the name parvifolia was applied, but not published, by Shuttleworth to specimens of the same thing collected in flower by Rugel, in 1843, also at St. Marks. I therefore publish it as above.

It is quite distinct from *C. racemiflora*, the lower habit, smaller leaves, shorter racemes, and globose, not ovoid, capsules readily serving to separate it from that species.

*Acer Drummondii* Hook. & Arn. Very common in swamps, No. 2147. My No. 872, of the 1894 collection, is also this species, and not *Acer rubrum* L., under which name it was distributed.

*Sapindus Manatensis* Radlkofer. I secured good fruiting specimens of this tree, No. 2460. The type locality is the mouth of the Manatee River. My collection was made on the south side of Sneed's Island, not far from the mouth of this river. Mr. J. H. Simpson, of Manatee, a gentleman very familiar with the flora of that region, informs me that the tree is confined to the above named island, and thrives only there; that there are a few trees on the mainland, but that they are stunted and not at home.

From the above it would seem that my specimens were from the type locality, as it is not known to occur anywhere else near the mouth of the Manatee River. It is certainly distinct from *S. marginatus*, not only in the shape and size of the glabrous leaves, but also in the larger and oblong fruit. In *S. marginatus* the fruit is globose, and the leaves pubescent.

SIDA RUBRO-MARGINATA n. sp.

Much branched, 6–10 dm. tall. Stems purple, sparingly pubescent or glabrous; stipules linear, 5–10 mm. long; leaves bright light green, glabrous, lanceolate, narrow-elliptic, or obovate, serrate, purple-margined, acutish at the apex, narrowed and rounded

at the base, 1.5–5.5 cm. long, 3–20 mm. wide, on slender petioles 3–5 mm. long; peduncles single, shorter than the leaves, 7–15 mm. long; flowers light orange, 3–3.5 cm. in diameter; calyx angled, its teeth deltoid, acute or acuminate, about 5 mm. long; petals obovate-deltoid, about 1.5 cm. long, unequally 2-lobed at the apex, the margins, except toward the base, ciliate with short glandular hairs; carpels 8-10, usually 2-awned.

Collected at Ballast Point, near Tampa, No. 2472. Also secured by Dr. Palmer in 1874, at Fort Capron, on the Indian River, No. 54.

Abundantly distinct from *S. rhombifolia* L. by its taller habit, bright light green thicker leaves, shorter peduncles, and larger deeper colored flowers. *S. rhombifolia*, moreover, is apparently introduced into Florida, as it occurs only in waste places, while this plant is evidently indigenous to the state.

CORNUS MICROCARPA n. sp.

Shrub 3–4 metres tall, stems slender and recurved, branching toward the top. Bark gray; branches brownish, sparingly pubescent; leaves 3–9 cm. long, 1.5–4.5 cm. broad, oval, acute at the base, abruptly blunt-pointed at the apex, appressed-pubescent on both sides, sparingly so on the upper surface, the hairs on the lower surface curled; petioles 2–6 mm. long, more or less pubescent; cymes pubescent; flowers white, 6 mm. in diameter; calyx-teeth deltoid, about .5 mm. long; petals ovate, about 2.5 mm. long, 1–1.3 mm. broad, appressed-pubescent on the outside; filaments subulate, 2.5 mm. long; anthers 1.5 mm. long; fruit light blue, about 4 mm. in diameter, the stone slightly compressed, longer than broad, 2.5–3 mm. long, 2–2.5 mm. broad.

Collected in fruit in low woods at River Junction, Gadsden Co., No. 2589. Specimens of the same in flower, collected by Dr. Chapman, are in the Herbarium of Columbia College, and also in the National Herbarium.

Nearest to *C. asperifolia*, but easily distinguished by its smaller flowers and fruit, the latter light blue and with a stone longer than broad.

Dr. Chapman, in his Flora of the Southern United States, p. 168, describes the fruit of the *C. asperifolia* of that work as "pale blue." In Coulter & Evan's monograph of the genus Cornus, the fruit of *C. asperifolia* is given as white. I do not remember having seen a white-fruited Cornus in the state. It is probable that

all of the Florida material, hitherto referred to *C. asperifolia*, belongs here.

*Bumelia lanuginosa* Pers. Quite frequent around Lake City, Columbia Co., No. 2167. The plant I distributed in my 1894 collection, under the above name, No. 818, is probably *B. tenax*.

*Jacquemontia tamnifolia* (L.) Griseb. Quite common in a field at Tallahassee, Leon Co., No. 2516. I do not find that it has before been recorded from Florida.

*Nama corymbosa* (Ell.) Kuntze. (*Hydrolea corymbosa* Ell.) In 1894 I secured a few specimens of this rare plant. Last summer I found it growing in great abundance in the flatwoods along the Jacksonville, Tampa & Key West R. R., between Paola and Sanford. No. 2281.

VERBENA (§NOBILES) TAMPENSIS n. sp.

Glabrous, or pubescent with short appressed hairs. Stems erect from a decumbent and often creeping base, usually more or less branched; leaves oval or ovate, paler beneath, 2.5–7 cm. long; acute, cuneate and entire at the base, narrowed into margined petioles .5–2.5 cm. long, coarsely and irregularly crenate-serrate; spikes 2–10 cm. in length, capitate when young, cylindric in age and often interrupted below, its bracts subulate, strigillose, ciliate, about one-half as long as the calyx; calyx strigillose, 12–15 mm. in length, its teeth subulate, 2–4 mm. long; corolla purple, the tube pubescent on the outside and in the throat, about 1.5 cm. long, the limb 1 cm. in diameter, its lobes obovate, emarginate at the apex; anthers without a gland on the connective; nutlets cylindric with a broadened base, about 4 mm. long, furrowed a the base and areolate toward the apex.

Collected just back of the beach line at Ballast Point, near Tampa, No. 2470. Curtiss's No. 1963, distributed as *V. Aubletia* L., belongs here; also Garber's plant, collected at Tampa in May, 1876. In general appearance this plant has some resemblance to *V. Aubletia*, but a critical examination will readily show its differerences. The entire absence of the gland on the anther connective, a character of the section in which *V. Aubletia* is placed, at once makes manifest its dissimilarity to that species.

MONARDA PUNCTATA LEUCANTHA n. var.

Of much taller habit, 10–15 dm., the flowers pure white, spotted with purple; otherwise much like the type.

A few specimens of this were secured at Ballast Point, near

Tampa, No. 2420; but on Sneed's Island, near the mouth of the Manatee River, it occurred in great abundance and luxuriance, forming large masses, at the foot of a shell mound, No. 2456. In both localities the flowers were a pure white. *Monarda punctata* was observed in great abundance in the northern tier of counties from Lake City westward, being particularly common around Tallahassee and River Junction. The flowers were invariably of a dull golden yellow. From Tampa south this was entirely replaced by the white-flowered form.

SCOPARIA GRANDIFLORA n. sp.

Plant glabrous, or sparingly puberulent, 7–12 dm. tall, usually much branched, the branches erect or ascending, in whorls of three. Leaves in 3's, 2–5 cm. long, 3–10 mm. wide, oblanceolate, acute, entire and attenuate at the base into short margined petioles, remotely and irregularly serrate above the middle with obtuse teeth; pedicels single in the axils of the leaves, filiform, 4–8 mm. long, spreading or ascending; calyx 3 mm. long, its 4 lobes oval, obtuse or acutish, about 2.5 mm. long, 3-nerved, strongly glandular on the outside, ciliate; corolla white, 1 cm. broad, its 4 lobes oblong-obovate, 4 mm. long, 2.5 mm. broad; stamens 4, the filaments about 2.5 mm. long, the anthers oblong, 1.5 mm. long, .75 mm. broad; ovary oval, one-half as long as the style; capsule ovoid, about 2.5 mm. long, equalling or slightly shorter than the calyx and as long as or exceeded by the style; seeds .5 mm. long, oblong.

Collected in the flatwoods at Tampa, where it was quite frequent, No. 2417. Also secured by Mr. J. H. Simpson in 1889, and determined as *S. dulcis*, to which species it has but a superficial resemblance. What appears to be the same thing was found by Mr. H. J. Webber at Manatee.

This plant is readily distinguished from *S. dulcis* L. by its greater height; the larger corolla, twice the diameter of that of *S. dulcis*; the ciliate and less strongly nerved calyx lobes; the capsule not exceeding the sepals; the longer style; and the much larger seeds, nearly twice the size of those in *S. dulcis*.

UTRICULARIA FLORIDANA n. sp.

Stems rooting at the base, 6–15 dm. in length. Leaves capillary, much divided; scapes simple, or sometimes with a single branch, weak and tortuous, 15–40 cm. in length, 10–25-flowered, thick and spongy, much attenuated toward the base; pedicels

erect or ascending, even in fruit, 1–1.5 cm. long, slender; flowers yellow, about 1.5 cm. in diameter; spur conic-cylindric, straight, obtuse, ascending, about 7 mm. long, shorter than the lower lip; capsule 5–8 mm., in diameter.

Very abundant in a small pond between Eustis and Umatilla, Lake Co., No. 1970. It formed a belt, a few feet from the shore, some 15 feet wide. This is apparently the same as my No. 492 of the 1894 collection, obtained in a sterile condition at Lake Irma, near Eustis. It grew nearer the shore and in shallower water than the plant I collected the past summer, so I was enabled to secure the lower portions of the plant. The stem crept along the mud at the bottom, sending up two kinds of branches, one bearing leaves and no bladders, the other the reverse of this. In this respect it is related to *U. oligosperma*, but in that species the stem is free-swimming; it also differs much in other particulars.

*Plantago aristata* Michx. This plant is just making its appearance around Eustis, Lake Co., in waste places and orange groves. None of it was observed in 1894, and but a few specimens this past summer. No. 1828.

EUPATORIUM ANOMALUM n. sp.

Whole plant, particularly the branches of the inflorescence, pubescent with short appressed rigid hairs. Stem 8–15 dm. tall; leaves spreading or ascending, 3–7 cm. long, 1–3 cm. broad, ovate to ovate-lanceolate, acute at both ends, short-petioled, coarsely and irregularly serrate, obscurely 3-nerved; involucre 5-flowered, resinous-dotted, cylindric, 5–6 mm. long, about 2 mm. in diameter, its 10-12 acute or acutish scales appressed-pubescent, scarious on the margins, the 5 inner ones linear or linear-lanceolate, much exceeded by the pappus, the outer scales much shorter than the inner; achenes resinous-dotted.

Collected at Lloyds, Jefferson Co., at the margin of a low woods, No. 2515. Apparently the same plant occurs at Fortress Monroe, Va., represented by a specimen in the National Herbarium, collected by Dr. Geo. Vasey.

Its affinity is with *E. hyssopifolium*, but readily separated from any form of that species by its much taller habit, and the broader and differently shaped leaves which are coarsely and irregularly serrate.

LACINARIA CHAPMANII LONGIFOLIA n. var.

Stems minutely pubescent, 6–15 dm. tall. Leaves narrowly

linear, much attenuated at the base, glabrous, punctate, 1-nerved, the lower 10–15 cm. in length; inflorescence, involucre and flowers much as in the type.

In pine lands between Tampa and Ballast Point, about 5 miles from the former place, along the line of the electric railroad, No. 2473. The taller stem, the constantly glabrous and longer leaves, and the more southern range, would seem to make this plant worthy of varietal rank. Further field observations may, however, prove it to be but a form of the type, which occurs in the western extension of the State.

*Lacinaria Garberi* (A. Gray) Kuntze. This rare plant was very plentiful on the prairies near Palmetto, Manatee Co., No. 2430. Dr. Garber, in whose honor it was named, collected it first at Tampa.

CHRYSOPSIS FLEXUOSA n. sp.

Whole plant, with the exception of the involucres and upper surface of the leaves, copiously lanate, the hairs silky and deciduous. Stems 2–4 dm. tall, flexuous, ascending, branching above; leaves ascending, rough on the upper surface, oblong-linear to linear or linear-lanceolate, acuminate, often curved, about 5-nerved, those on the stem 3–6 cm. long, 2–8 mm. broad; involucres long-peduncled, cylindric-campanulate, about 1 cm. long, 6 mm. in diameter; scales of the involucre imbricated in 4–6 rows, linear to linear-lanceolate, acuminate, prominently keeled, glabrous or sparsely pubescent with long loose hairs; rays broadly linear to oval, 7–9 mm. long, usually shortly toothed at the apex.

In the pine lands at Bellair, Leon Co., about four miles south of Tallahassee, No. 2545. Nearest to *C. falcata*, from which it is readily distinguished by its much larger involucres, pubescence, and range. *C. falcata* Ell. is confined to the coast from Massachusetts to New Jersey.

ERIOCARPUM MEGACEPHALUM n. sp.

Plant much branched, about one metre in height. Stem and branches pubescent with short villous hairs, striate; leaves sparsely pubescent, sessile, lanceolate to linear-oblong, 2–7 cm. in length, 5–20 mm. broad, coarsely and remotely serrate with curved spreading teeth; short peduncles very villous at the summit and bearing a single head 2–3 cm. in diameter; involucres about 1 cm. high, its scales short-hispid, acute, linear to linear-lanceolate, the outer ones slightly shorter than the inner; rays numerous linear to

linear-oblong, obtuse or acute, about 1 cm. long, 2–3.5 mm. broad.

Quite common on the south shore of Sneed's Island, near the mouth of the Manatee River, No. 2432.

PLUCHEA LONGIFOLIA n. sp.

Whole plant, particularly the inflorescence, pubescent with short villous hairs. Stem 6–10 dm. tall, branched at the summit; leaves crowded, erect or ascending, somewhat rough especially on or near the margins, denticulate or serrate, oblong or oval, those on the stem 6–16 cm. long, 2.5–5.5 cm. broad, the lower ones acute and sessile at the base, the upper ones truncate or rounded and slightly clasping at the base; inflorescence corymbiform, compact; involucres campanulate, 7–10 mm. long, exceeded by the slightly tawny pappus; scales of the involucre imbricated in 4–6 rows, ciliate, the outer ones broadly ovate and obtuse or apiculate, the innermost linear, acute.

Common in an open swamp just back of Titusville, Brevard Co., No. 2293. In the field the tawny white pappus makes the plant very conspicuous.

PLUCHEA IMBRICATA (Kearney) (*Pluchea foetida imbricata* Kearney). Further observation of this plant in the field convinces me that it is worthy of specific rank, and so I raise it to that distinction. It often attains a height of 1–2 metres, being much taller than *P. foetida*, which rarely exceeds 6 dm. in height. The color of the foliage is much different, giving the plant a purplish hue. In *P. foetida* the leaves are a dull green. The most marked difference between the two species lies in the time of flowering, *P. foetida* having matured its seed before *P. imbricata* is fairly in bud. There is a difference of some six weeks between the flowering periods.

*Rudbeckia bupleuroides* Shuttlw. Collected in the flatwoods at St. Marks, Wakulla Co., No. 2538. I visited this place early in September, a little too late to secure good specimens of this rare composite. By diligent search I managed to obtain about a dozen presentable plants. It grows in the swampy part of the flatwoods, in company with *Lacinaria spicata*, *Eryngium Ravenelii*, *and E. virgatum*.